



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,705	08/05/2003	Isao Tsuru	241188US0	6742
22850	7590	01/29/2007	EXAMINER	
OBLON, SPIVAK, MCCELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SHOSHO, CALLIE E	
ART UNIT		PAPER NUMBER		
		1714		
MAIL DATE		DELIVERY MODE		
01/29/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/633,705	TSURU ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Callie E. Shosho	1714

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 4 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a)  They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b)  They raise the issue of new matter (see NOTE below);  
 (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5.  Applicant's reply has overcome the following rejection(s): see attachment.  
 6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1,2,6,7,11-13,16,19-24 and 26.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
 \_\_\_\_\_  
 12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13.  Other: \_\_\_\_\_.

Callie E. Shosho  
 Primary Examiner  
 Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' amendment filed 1/8/07 overcomes the claim objections and 35 USC 112 second paragraph rejections of record. Further, applicants' filing of a proper terminal disclaimer on 1/8/07 overcomes the double patenting rejection of record.

Further, applicants arguments with respect to EP 1113051 have been considered but they are moot in view of the discontinuation of the use of this reference against the present claims.

However, applicants' amendment does not overcome the 35 USC 103 rejection of record set forth in paragraph 11 of the office action mailed 9/8/06 utilizing Nakano et al. (U.S. 6,746,690) in view of Tabayashi et al. (U.S. 6,074,467).

Applicants argue that, contrary to examiner's position set forth on page 11, lines 12-19 of the office action mailed 9/8/06, Nakano et al. does not always require that the polymer is obtained from 5 monomers. Applicants argue that the presence of monomers (d) and (e) in Nakano et al. is only a preferred embodiment of Nakano et al.

However, attention is called to col.7, lines 41-44 of Nakano et al. that discloses that an aqueous dispersion of a water-insoluble polymer containing a pigment is favorable to use from the viewpoint of water resistance and fixing ability. Further, it is noted that Nakano et al. (col.8, lines 6-18 and col.10, lines 43-47) disclose that the water-insoluble vinyl polymer is preferably prepared by copolymerizing (a) monomer having salt-forming group, corresponding to presently claimed monomer (C), (b) a macromer including styrene macromer, corresponding to presently claimed monomer (D), (c) monomer copolymerizable with monomers (a) and (b), corresponding to presently claimed monomer (D) and more preferably the polymer is prepared by copolymerizing monomers (a), (b), and (c) as well as a mixture of (d) hydroxy group-containing

monomer including 2-hydroxyethyl (meth)acrylate or polyethylene glycol (meth)acrylate, corresponding to presently claimed monomer (A), and (e) alkylene oxide-containing monomer of the formula  $\text{CH}_2=\text{C}(\text{R}^1)\text{COO}(\text{R}^2\text{O})_p\text{R}_3$ , corresponding to presently claimed monomer (B), and that it is desired to utilize polymer obtained from monomers including (a), (d), and (e) from the viewpoints of dispersion stability and jetting stability. Thus, while it is agreed that it is not always required that the polymer of Nakano et al. is made from 5 monomers, it is significant to note that Nakano et al. explicitly disclose that it is favorable and desired to use water-insoluble polymer that is most preferably made from monomers (a)-(e) as described above.

Applicants argue that the comparative date previously set forth in the 1.132 declaration filed 6/12/06 is persuasive in overcoming the rejection of record utilizing Nakano et al.

It is noted that the declaration compares aqueous dispersion within the scope of present claims, i.e. comprising vinyl polymer particles obtained from polyethylene glycol monomethacrylate, polypropylene glycol monomethacrylate, methacrylic acid, styrene, and styrenic monomer (example 3), with aqueous dispersion outside the scope of the present claims, i.e. comprising vinyl polymer particles obtained from polyethylene glycol monomethacrylate, methacrylic acid, and styrene (example 1) or obtained from polyethylene glycol monomethacrylate, methacrylic acid, styrene, and styrenic monomer (example 2). It is shown that the aqueous dispersion of the present invention is superior in terms of angular dependency of color tone, i.e. ink has substantially improved color properties and will remain stable even if printed image is not observed at angle.

Applicants argue that example 2 (comparative) and example 3 (inventive) provide a side-by-side comparison that shows the effect of having two different alkylene oxide containing monomers.

However, it is the examiner's position that the data is not persuasive give that the data is not commensurate in scope with the scope of the "closest" prior art, namely, Nakano et al. that already recognize the criticality of using aqueous dispersion comprising water-insoluble vinyl polymer obtained from two different alkylene oxide-containing monomers. That is, example 2 and example 3 compare aqueous dispersion within the scope of the present claims, i.e. comprising aqueous dispersion of water-insoluble polymer obtained from monomers including polyethylene glycol monomethacrylate and polypropylene glycol monomethacrylate, with aqueous dispersion outside the scope of the present claims, i.e. comprising aqueous dispersion of water-insoluble polymer obtained from monomers including polyethylene glycol monomethacrylate. However, Nakano et al. already disclose that it is favorable and desired to utilize aqueous dispersion comprising water-insoluble polymer that is obtained from monomers including (d) hydroxy group-containing monomer, i.e. polyethylene glycol (meth)acrylate, and (e) alkylene oxide-containing monomer of the formula  $\text{CH}_2=\text{C}(\text{R}^1)\text{COO}(\text{R}^2\text{O})_p\text{R}_3$ , i.e. polypropylene glycol monomethacrylate. While the motivation for using such aqueous dispersion of water-insoluble vinyl polymer, i.e. water resistance and fixing ability, is different than the motivation for using such polymer in the present invention, "obviousness under 103 is not negated because the motivation to arrive at the claimed invention as disclosed by the prior art does not agree with appellant's motivation", *In re Dillon*, 16 USPQ2d 1897 (Fed. Cir. 1990), *In re Tomlinson*, 150 USPQ 623 (CCPA 1966). Given that Nakano et al. disclose polymer as

presently claimed, it is clear that the polymer would also intrinsically possess the same angular dependency.

Further, the data is not persuasive given that the data is not commensurate in scope with the scope of the present claims.

Specifically, there is only data at one amount of polyethylene glycol monomethacrylate, i.e. 10%, and one amount of polypropylene glycol monomethacrylate, i.e. 15%. This is significant given that the present claims require polymer obtained from 5-45% of monomer (A), i.e. polyethylene glycol monomethacrylate, and 5-45% monomer (B), i.e. polypropylene glycol monomethacrylate. As set forth in MPEP 716.02(d), “the objective evidence of non-obviousness must be commensurate in scope with the scope with the claims which the evidence is offered to support.” In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range, *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA). It is noted that the data set forth in the declaration filed 6/12/06 does not show that the unexpected results occur over the entire range of presently claimed monomer amounts.

Applicants also argue that Nakano et al. do not disclose or suggest that significantly improved and/or different performance may result from using two different types of alkylene oxide monomer units and further that Nakano et al. make no distinction between alkylene oxide monomer units and discloses only a single example containing any alkylene oxide monomer.

However, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others,” *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of the reference as a whole discloses, as discussed above, that it is favorable to use a water-insoluble polymer that is

most preferably obtained from monomers (a)-(e) wherein (d) monomer is polyethylene glycol (meth)acrylate, i.e. corresponding to presently claimed monomer (A), and (e) monomer is alkylene oxide-containing monomer of the formula  $\text{CH}_2=\text{C}(\text{R}^1)\text{COO}(\text{R}^2\text{O})_p\text{R}_3$ , i.e. polypropylene glycol (meth)acrylate corresponding to presently claimed monomer (B). Further, given that Nakano et al. disclose polymer obtained from monomers as presently claimed, it is clear that the polymer of Nakano et al. would intrinsically possess such improved and/or different performance.

Applicants argue that it does not matter that Nakano et al. exemplifies a composition containing additional monomer units because those additional monomer units in no way disclose or suggest the combination of alkylene oxide-containing monomer units required to be present in the present claims.

However, applicants' argument is not understood given that the additional monomers disclosed by Nakano et al. do in fact disclose or suggest the presently claimed combination of alkylene-oxide monomer units as presently claimed given that they include monomers (d) and (e) as described above.

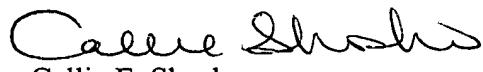
Applicants also argue that while Nakano et al. disclose a large family of alkylene oxide group containing monomer units represented by formula (I) as set forth in col.4, line 45-col.5, line 54, Nakano et al. nowhere discloses the particular combination of alkylene oxide containing monomer units such as the combination presently claimed.

While it is agreed that Nakano et al. disclose the use of alkylene oxide containing monomer of formula (I), it is significant to note that this disclosure includes the explicit naming of monomers corresponding to presently claimed monomer (B), i.e. methoxypropylene glycol

Art Unit: 1714

(meth)acrylate, and further that this monomer is used in combination with monomer (d) which explicitly recites monomer identical to monomer (A), i.e. polyethylene glycol (meth)acrylate.

In light of the above, it is the examiner's position that Nakano et al. remains a relevant reference against the present claims and thus, present claims 1-2, 6-7, 11-13, 16, 19-24, and 26 remain rejected by Nakano et al. in view of Tabayashi et al.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
1/24/07